

WHAT IS CLAIMED IS:

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1. A cryopreservation medium for hematopoietic cells comprising a balanced electrolyte solution incorporating at least one cryoprotective agent that is arabinogalactan, or a biological or functional equivalent thereof, wherein the cryoprotective agent is present in an amount that results in a high survival rate for the cells.
 2. The cryopreservation medium of claim 1 wherein the cells are peripheral blood lymphocytes.
 3. The cryopreservation medium of claim 1 that comprises arabinogalactan.
 4. The cryopreservation medium of claim 1 further comprising a cryoprotective agent that penetrates the cell membrane.
 5. The cryopreservation medium of claim 4 wherein the cryoprotective agent that penetrates the cell membrane is glycerol or propylene glycol.
 6. The cryopreservation medium of claim 1 further comprising a cryoprotective agent other than arabinogalactan or a biological or functional equivalent thereof which does not penetrate the cell membrane.
 7. The cryopreservation medium of claim 1 which does not comprise protein.
 8. The cryopreservation medium of claim 1 which is infusible.
 9. The cryopreservation medium of claim 1 which does not comprise dimethylsulfoxide.

10. The cryopreservation medium of claim 1 which does not comprise serum.
11. The cryopreservation medium of claim 1 wherein the cells are human cells.
12. The cryopreservation medium of claim 1 wherein the cells are non-human vertebrate cells.
13. The cryopreservation medium of claim 1 wherein the hematopoietic cells are freshly isolated lymphocytes, stem cells, activated lymphocytes, genetically modified lymphocytes, or a combination thereof.

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14. A composition suitable for administration to a human, comprising a suspension of hematopoietic cells in a cryopreservation medium comprising a balanced electrolyte solution incorporating at least one cryoprotective agent that is arabinogalactan, or a biological or functional equivalent thereof.

15. A composition comprising a suspension of hematopoietic cells in a cryopreservation medium comprising a balanced electrolyte solution incorporating at least one cryoprotective agent that is arabinogalactan, or a biological or functional equivalent thereof.

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16. The composition of claim 14 or 15 wherein the cells are peripheral blood lymphocytes.

17. The composition of claim 14 or 15 wherein at least one of the cryoprotective agents is arabinogalactan.

18. The composition of claim 14 or 15 further comprising a cryoprotective agent that penetrates the cell membrane.

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19. The composition of claim 18 wherein the cryoprotective agent that penetrates the cell membrane is glycerol or propylene glycol.
20. The composition of claim 14 or 15 further comprising a cryoprotective agent other than arabinogalactan or a biological or functional equivalent thereof which does not penetrate the cell membrane.
21. The composition of claim 14 or 15 which does not comprise protein.
22. The composition of claim 14 or 15 which is infusible.
23. The composition of claim 14 or 15 which does not comprise dimethylsulfoxide.
24. The composition of claim 14 or 15 wherein the cells are human cells.
25. The composition of claim 14 or 15 wherein the hematopoietic cells are isolated lymphocytes, stem cells, activated lymphocytes, genetically modified lymphocytes, or a combination thereof.
26. A method for preserving hematopoietic cells comprising:
 - (a) contacting the cells with a cryopreservation medium comprising a balanced electrolyte solution and at least one cryoprotective agent that is arabinogalactan, or a biological or functional equivalent thereof, to yield a cell suspension; and
 - (b) freezing the cell suspension to yield a frozen cell suspension.
27. The method of claim 26 further comprising thawing the frozen cell suspension under conditions that maintain cell viability.

28. The method of claim 26 wherein the cells are human cells.
29. The method of claim 26 wherein the cells are freshly isolated lymphocytes, stem cells, activated lymphocytes, genetically modified lymphocytes, or a combination thereof.
30. The method of claim 26 wherein the cells are peripheral blood lymphocytes.

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a₃ → ~~31. A frozen composition comprising i) a balanced electrolyte solution, ii) at least one cryoprotective agent that is arabinogalactan, or a biological or functional equivalent thereof, and iii) hematopoietic cells.~~

32. A frozen hematopoietic cell-containing composition made according to the method of claim 26.

33. The cryopreservation medium of claim 5 wherein the cryoprotective agent that penetrates the cell membrane is glycerol.

34. The cryopreservation medium of claim 33 wherein the concentration of glycerol is about 1% to about 3%.

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